

Chapter 21

Monitoring Jobs and Inflation

Employment and Unemployment

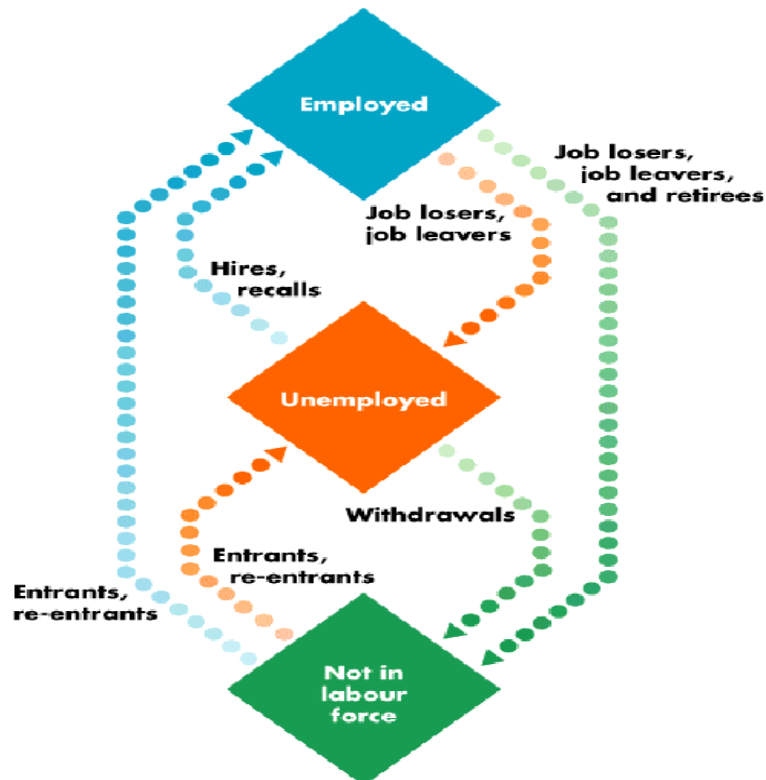
- Every month, Statistics Canada surveys 54,000 households to track the state of the nation's labour market.
- This survey is called the Labour Force Survey.
- The **working-age population** is the total number of people aged 15 years and over.
- The working-age population divides into two groups: those in the labour force and those not in the labour force.
- The **labour force** divides into two groups: the employed and the unemployed.
- A person is employed if they have either a full-time job or a part-time job.
- A person is unemployed if they are in one of the following categories:
 - Without work but has made specific efforts to find a job within the previous four weeks
 - Waiting to be called back to a job from which he or she has been laid off
 - Waiting to start a new job within four weeks
- Statistics Canada calculates four labour market indicators:
 - The unemployment rate
 - The involuntary part-time rate
 - The labour force participation rate
 - The employment-to-population ratio
- The **unemployment rate** is the percentage of the people in the labour force who are unemployed.
- Unemployment rate = $(\text{Number of people unemployed} \div \text{Labour force}) \times 100$.

- The involuntary part-time rate is the percentage of people in the labour force who have part-time jobs and want full-time jobs.
- Involuntary part-time rate = $(\text{Number of involuntary part-time workers} \div \text{Labour force}) \times 100$.
- The **labour force participation rate** is the percentage of the working-age population who are members of the labour force.
- Labour force participation rate = $(\text{Labour force} \div \text{Working-age population}) \times 100$.
- The **employment-to-population ratio** is the percentage people of working age who have jobs.
- Employment-to-population ratio = $(\text{Number of people employed} \div \text{Working-age population}) \times 100$.
- The labour force participation rate and the employment-to-population ratio show upward trends.
- The unemployment rate increases in recessions and decreases in expansions.
- The upward trends in the labour force participation rate and the employment-to-population ratio are accounted for mainly by the increasing participation of women in the labour market.

Unemployment and Full Employment

- Two types of labour are excluded from the official unemployment measure:
 - Marginally attached workers
 - Part-time workers who want full-time jobs
- A **marginally attached worker** is a person who currently is neither working nor looking for work but has indicated that he or she wants and is available for a job and has looked for work sometime in the recent past.
- A **discouraged worker** is a marginally attached worker who has stopped looking for a job because of repeated failure to find one.
- People become unemployed if they:
 - Lose their jobs and search for another job
 - Leave their jobs and search for another job
 - Enter or re-enter the labour force to search for a job
- People end a spell of unemployment if they:
 - Are hired or recalled
 - Withdraw from the labour force

- The figure below shows the labour market flows that create and end unemployment.



- People who are laid off from their jobs, either permanently or temporarily, are called **job losers**.
- People who voluntarily quit their jobs are called **job leavers**.
- People who enter or re-enter the labour force are called **entrants** and **re-entrants**.
- Most unemployment results from job loss.
- Job losers is the largest category of unemployment and the one that fluctuates most over the business cycle.
- Entrants and re-entrants also fluctuate with the business cycle.
- Unemployment is classified into four types:
 - Frictional
 - Structural
 - Seasonal
 - Cyclical
- **Frictional unemployment** is the unemployment that arises from normal labour market turnover.
- **Structural unemployment** is the unemployment that arises when changes in technology or international competition change the skills needed to perform jobs or change the locations of jobs.

- **Seasonal unemployment** is the unemployment that arises because the number of jobs available has decreased because of the season.
- **Cyclical unemployment** is the unemployment that fluctuates over the business cycle.
- **Full employment** occurs when there is no cyclical unemployment or, equivalently, when all the unemployment is frictional, structural, and seasonal.
- The unemployment rate at full employment is called the **natural rate of unemployment**.
- The quantity of real GDP at full employment is called **potential GDP**.
- Over the business cycle, real GDP fluctuates around potential GDP and the unemployment rate fluctuates around the natural rate of unemployment.
- When the economy is at full employment, the unemployment rate equals the natural rate of unemployment and real GDP equals potential GDP.
- When the unemployment rate is less than the natural rate of unemployment, real GDP is greater than potential GDP.
- And when the unemployment rate is greater than the natural rate of unemployment, real GDP is less than potential GDP.

The Price Level and Inflation

- The **Consumer Price Index (CPI)** is a measure of the average of the prices paid by urban consumers for a fixed “basket” of consumer goods and services.
- The CPI is defined to equal 100 for a period called the **base period**.
- Constructing the CPI involves three stages:
 - Selecting the CPI basket
 - Conducting the monthly price survey
 - Calculating the CPI
- The CPI calculation has three steps:
 - Find the cost of the CPI basket at base period prices
 - Find the cost of the CPI basket at current period prices
 - Calculate the CPI for the base period and the current period
- $$\text{CPI} = (\text{Cost of CPI basket at current period prices} \div \text{Cost of CPI basket at base period prices}) \div 100$$
- Study pp. 499-500 for an example of a CPI calculation.

- The **inflation rate** is the percentage change in the price level from one year to the next.
- Inflation rate = $[(\text{CPI this year} - \text{CPI last year}) \div \text{CPI last year}] \times 100$
- When the price level rises rapidly, the inflation rate is high, and when the price level rises slowly, the inflation rate is low.
- The CPI is not a perfect measure of the price level, and changes in the CPI probably overstate the inflation rate.
- The main sources of bias in the CPI are:
 - New goods bias
 - Quality change bias
 - Commodity substitution bias
 - Outlet substitution bias
- The bias in the CPI has three main consequences. It
 - Distorts private contracts.
 - Increases government outlays.
 - Biases estimates of real earnings.
- Alternate price indexes include the GDP deflator and the chained price index for consumption.
- The **GDP deflator** is an index of the prices of all the items included in GDP and is the ratio of nominal GDP to real GDP.
- The **chained price index for consumption** is an index of the prices of all the items included in consumption expenditure in GDP and is the ratio of nominal consumption expenditure to real consumption expenditure.